Electric Vehicle PowerReady Program

Success Story: Managed Microgrid

Customer	Contractor	Project Type	Location	Charger Type
Vail Buick GMC	**Sprocket Power**	**Commercial**	**Bedford Hills, NY**	**DCFC & Level 2 EV Chargers**

Overview

Vail Buick GMC, a Buick dealership in Bedford Hills, New York, wanted to install EV charging infrastructure and load management technology to prepare for new electric vehicle inventory. This would help establish Vail Buick GMC as a business and climate leader that contributes to improving air quality and meeting NY's carbon emission reduction goals.

The dealership soon learned that to accommodate a DC Fast Charging station and several Level 2 stations, they would need to upgrade to 480V service and develop a strategy to manage charging station operation and minimize operating costs.

With partner, Sprocket Power, they were able to take advantage of Con Edison programs and federal and NY state incentives to offset the upfront costs and install a managed microgrid system including solar, storage, building managment, EV charger management and total facility management.

NY state and Con Edison programs, like SmartCharge Commercial and Smart Usage Rewards, provide incentives year-round to control facility use and EV charging during peak times, which also contribute to a stronger energy grid.

Vail Buick GMC's adoption of a managed microgrid to support their EV charging needs not only helped their bottom line, but also takes them a step closer to achieving interrelated climate and economic goals in alignment with New York's Climate Leadership and Community Protection Act.

To further inform the community about the managed microgrid system, the dealership, Sprocket Power, and Bedford 2030, a prominent local sustainability group, partnered with SUNY Purchase students to create an engaging illustration about about the purpose and operation of the system. The illustration will not only educate, but also offer a performance dashboard to track the system's ongoing measured impact on business, community and climate.

Project Snapshot

Solar Photovoltaic Panels

Solar Array Size: **7,000 Sq Ft**

Solar Capacity: **50kWdc**

Battery Storage

Capacity/Energy: **100 kW/ 186 kWh**

EV Charging

Level 2: **Two 19.5 kW chargers**

Level 3 (DCFC): **One 62.5 kW charger**

Con Edison Service Upgrade

208V to 480V

Annual Greenhouse Gas Emission Reduction

187 Tons of $C0_2$

Reduced Operating Cost

Net Annual Utility Bill (Year 5): **$32,906 (79% reduction)**

Cost and Incentive Breakdown

Total Cost: $888,452

Solar | Storage | Electrical Cost: **$639,200**

EV Charging Cost: **$249,252**

Total Incentive: $625,525

Investment Tax Credit & Modified Accelerated Cost Recovery System: **$401,070**

EV Charging Incentive: **$69,519**

Net Capital Cost: $232,927

Internal Rate of Return: **22%**

Incentive levels may have changed since this project was completed. For current incentives and more, visit **conEd.com/PowerReady, or email **EVMRP@conEd.com**.*

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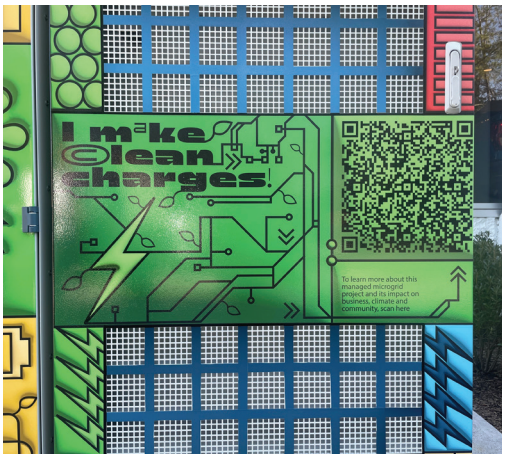

Testimonial

"As I prepared for our EV roll out, a main concern was the volatile and rising costs associated with EV charging. The microgrid approach gave me the ability to control these expenses and maintain predictability over my bottom line—all while making my business more eco-friendly and moving to a zero carbon future."

—Greg Vail, Vice President, Vail Buick GMC

Project Partners

Developer	Approved Contractor	Equipment	Software
Participating Contractor: SPROCKET POWER	LIPPOLIS ELECTRIC, INC.	chargepoint	SPROCKET POWER
	64 SOLAR	ENCORP POWER FORWARD	energy toolbase
	INF ASSOCIATES ENERGY SOLUTIONS	socomec Innovative Power Solutions	Ranial Systems Convergence of Creative Minds